DEVELOPING AND IMPLEMENTING A QI PLAN

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Contents

DEVELOPING AND IMPLEMENTING A QI PLAN

The goal of this module is to highlight the important role of an effective QI Plan in improving performance of an organization's health care systems. The module exemplifies how an organization establishes a QI plan and emphasizes elements necessary for the successful development of an organizational QI Plan.

Part 1: Introduction

What Is a Quality Improvement Plan

The QI Plan is a detailed, and overarching organizational work plan for the health care organization's clinical and service quality improvement activities. The QI Plan is generally developed by executive and clinical leadership and in many organizations must be approved by the organizations governing body such as a Board of Directors. The QI Plan serves as a road map for all quality activities, both operational and clinical. A QI program or project would fall within the purview of the QI Plan. A QI Plan generally outlines the specific clinical focus area for the current and subsequent calendar years. Often, the QI Plan is developed as an outgrowth of the evaluation of the previous year's QI activities, organizational priorities and organizational program requirements. A QI Plan should have the following characteristics:

- A systematic process with identified leadership, accountability, and dedicated resources;
- Use of data and measurable outcomes to determine progress toward relevant, evidence-based benchmarks;
- Focus on linkages, efficiencies, and provider and client expectations in addressing outcome improvement;
- Continuous process that is adaptive to change and that fits within the framework of other programmatic quality assurance and quality improvement (QI) activities (i.e. JCAHO, Medicaid, and other HRSA programs);
- Data collected is used to feedback into the process to assure that goals are accomplished and they are concurrent with improved outcomes.

The Purpose of a QI Plan

The purpose of the Quality Improvement (QI) Plan is to provide a formal ongoing process by which the organization and stakeholders utilize objective measures to monitor and evaluate the quality of services, both clinical and operational, provided to the patients. The QI Plan, which often addresses general medical, behavioral health and oral health care and services, defines and facilitates a systematic approach to identify and pursue opportunities to improve services and resolve identified problems.

QI Plan versus QI Project

The QI Plan should be distinguished from a QI Project as they are very different. As mentioned in the introduction, the QI Plan is the serves as the organizations strategic plan for quality improvement. The QI Plan serves as an ongoing monitoring and evaluation tool for organizations and their key stakeholders. The Plans generally outlines time-framed and realistic goals and includes related performance measures that are responsive to the identified primary health care needs of the community served and the strategic needs of the organization. A QI Project is born out of the QI Plan. Often priority areas have been identified such as disease states prevalent in the community, or required performance measures based on funders and a QI Team will then develop a QI Project based on these priority areas. Often the QI team will review baseline data on measures outlined in the QI Plan to determine the priority of focus for the QI Project. For example if the QI Plan identifies the diabetes measure: *Percentage of diabetic patients whose HbA1c levels are less than or equal to 9 percent* but baseline data pulled from the health care organization's EMR indicates that 90% of their diabetic patients have an HbA1c less than 9 percent, an organization might consider a different measure on which to focus their QI Project. Possibly one that they could have a greater improvement impact. The QI Plan would still require that the organization periodically monitor the HbA1c levels for their patient population so not to drop below 90% of patients with an HbA1c less than 9% but, the QI project improvement efforts would likely be better suited to focus on a measure that the QI project could impact and focus on making significant improvements.

Part 2: Structure and Leadership

Organizational structure is a formal, guided process for integrating the people, information, and technology of an organization, and serves as a key structural element that allows organizations to maximize value by matching their mission and vision to their overall strategy in quality improvement. (1) Leadership and the organizational structure play a key role in the development and implementation of a QI Plan. Leadership works directly and openly to improve quality by setting priorities, modeling core values, promoting a learning atmosphere, acting on recommendations, advocating for supportive policies, and allocating resources for improvement. Implementing a QI Plan requires a clear delineation of oversight roles and responsibilities and accountability. The specific organizational structure for implementing a QI Plan can vary greatly from one organization to another but one common component is the role of leadership in supporting the organizational structure.

The Organizational Structure

As previously stated, the organizational structure for implementing a QI Plan can vary from one organizational to another. There are however, key components to a successful organizational structure. Successful organizational structures consider characteristics such as connection to senior and board leadership. Highlighted below are details on the key elements of the organizational structure in the development and implementation of a QI Plan in a health care organization.

The Role of Leadership

Planning and managing QI has become a priority for senior leaders and chief medical officers and a defining competency for successful organizations [2]. Senior leaders sit at the top of a corporation's organizational chart, and their leadership helps set the direction of the organization and guide quality-improvement planning and efforts. The link between leadership and quality has been studied in a number of organizations implementing quality improvement. These studies found an adherent link between leadership and commitment to a quality-improvement processes. (3) They found that top management's physical presence, visibility and concern for quality improvement were associated with transformational leadership and demonstrated that leadership directly impacts the commitment of an organization to quality improvement.

Board of Directors

Momentum has built over time for health care organization boards to be involved in and accountable for the quality of care delivered at their institutions [4]. The 1999 report, To Err is Human, describes patient safety as a necessary organizational goal. It further states, 'this process begins when boards of directors demonstrate their commitment to this objective by regular, close oversight of the safety of the institutions they shepherd.' Delivering high-quality care is becoming increasingly recognized as the responsibility of the entire organization. As payment structures evolve and incentive plans in consideration of payment for quality evolve, it is important that an organization work to involve the board in the development and management of the organizations QI Plan. The chart below highlights tools to help support and engage boards in the organizations development and management of the organizations QI Plan. Many of these tools address overcoming common barriers to boards such as poor communication between boards and physicians, fragmented information exchange, inadequate investment and disjointed committee structures.

Tools/Resources to engage the Board of Directors in QI Plan Development

Name	Link
State Healthy People 2010 Tool Library	http://www.phf.org/pmqi/state.htm
National Association of Community Health Centers	www.nachc.org
Crossing the Quality Chasm: A New Health System for the 21st Century	http://www.nap.edu/catalog/10027.html
Performance Management & Building QI into the organizations Culture	http://www.google.com/url?sa=t&source=web&cd=19&ved=0CDEQFjAIOAo&url=http%3A%2F%2Fnnphi.org%2FCMSuploads%2FQI-Culture-(Mason)-73955.ppt&ei=oO2lTMfMH4T58Ablr7yMAg&usg=AFQjCNHCgD9DNCSW9d56oYKxo-tR3-kJgA

Information Management (Technology)

Information management and technology are critical to improving quality. Information is needed to manage work processes at the point of clinical care and to compile reports that can be disseminated throughout the health-care delivery system. Recently there has been a concerted effort for organizations to adopt Electronic Medical Records (EMR), improving the information available to providers at the point of care. As organizations develop their QI Plan's they should consider the healthcare environment including national quality measurement and reporting systems. The adoption of health-care IT can be very expensive, and it will be important to develop strategies to synergize and standardize quality-improvement measures and efforts across the health care organization.

Note: If an organization is currently funded by HRSA, some performance measures, including the HRSA CCM set, may be among those that will be reported to HRSA. An organization should consult its program's Web site plus links to bureau- and office-required guidelines and measures for more information:

BPHC MCHB HAB BHPr ORHP OPAE/OHITQ ORO

General information on HRSA grants, including searchable guidelines, is available and accessible at the **HRSA Grants Web site.**

Grantees are encouraged to contact their project officers with questions regarding program requirements.

It should be noted that Information technology is simply a tool. As QI Plans are developed, revised or implemented; it continues to be essential to consider current processes, environmental scans of issues pertaining to the community where services are provided, regulatory requirements, funders, and stakeholder needs. These may change in an organization as healthcare evolves and as the market changes. An ongoing process for identifying these changes will be necessary to keep an organization ahead of the game in strategically planning for the future and developing a relevant and useful QI Plan.

Part 3: Developing a QI Plan

Quality Improvement (QI) plans, serve as the road maps for the quality management effort of the health care organization. They are also often the key deliverables for HRSA grantees based on program requirements. Below provides the process in developing a QI Plan within an organization. HRSA grantees are encouraged to consult its program's Web site plus links to bureau- and office-required guidelines and measures when developing the organizations QI Plan.

Define Organizational Priorities

Define Organizational Mission, Vision, and Scope of Service

It is often helpful to craft a vision for the QI Plan and have that vision serve as an overarching guide for the quality improvement process. The vision engages partners and stakeholders in the process. The vision statement generally serves a 3 to 5 year planning span and should be revisited annually to determine whether refinements are necessary.

Define Goals and Objectives

Once the QI plan is set and the priorities have been identified, the performance measures must be determined in order to put the plan into motion. Performance measures are designed to serve as yardsticks on which to measure quality. In order to measure a particular element of care, process, or outcome, indicators are selected to assess performance within a particular area of focus. Indicators are quantitative measures that can be used to assess and improve performance. While not a direct measure of quality, indicators are tools that can be used to direct attention to potential performance issues that may require more intense review.(5)

Clinical Goals

Clinical goals are generally set based on clinical performance measures and are derived from evidence-based clinical guidelines. Measurement allows an evaluation of an important outcome of care for a designated population of patients, and it is a proxy to understand the effectiveness of the underlying systems of care. Just as there are evidence-based care guidelines for many conditions, there also are established measures that indicate how effectively guidelines are translated to practice. National organizations carefully considered these measures, and it is advisable to adopt an established measure. Examples of general sources for clinical measures include:

- HRSA Core Clinical Measures (CCMs)
- Healthcare Effectiveness Data and Information Set (HEDIS)
- AHRQ Clearinghouse of Clinical Measures
- National Quality Forum
- Centers for Medicare and Medicaid Services/ Physician Quality Reporting Initiative (PQRI)
- American Medical Association – Physician Consortium for Performance Improvement
- National Initiative for Children's Healthcare Quality

Operational Goals

At the heart of operations are the systems and processes that keep information moving through a business and provide structure for those doing the work. Operations are the things a team does on a daily basis to make the organization run. Operations implement the strategy and planning that supports the organizations growth and development. Operational goals are set in consideration of the organizations strategic mission. Consideration must be given to key stakeholders and funding and other regulatory requirements of an organization. Generally an organization will have a well-developed balance of both clinical and operational measures to evaluate the overall organization.

To provide context for evaluating performance improvement in QI, an organization may choose to compare and benchmark its data against other health care organizations. Benchmarking is a process that compares organizational performance with health care industry best practices, which may include data from local, regional, or national sources. Benchmarking brings objectivity to the analysis of performance and identifies the strengths and weaknesses of a health care organization

S.T.E.E.P. Analysis

The second IOM report *Crossing the Quality Chasm*, asked for a fundamental change, recommending that the delivery of health care in the 21st century is based on 6 key dimensions (STEEP):

- Safety—avoid injury to patients from the care that is intended to help them
- Timeliness—reduce waits and harmful delays
- Effectiveness—provide services based on scientific knowledge to all who could benefit and refrain from providing services to those not likely to benefit (avoiding overuse and underuse, respectively)
- Efficiency—avoid waste
- Equitability—provide care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographical location, and socioeconomic status
- Patient centeredness—provide care that is respectful of and responsive to individual patient preferences, needs, and values(6)

The report urges all parties—policymakers, purchasers, regulators, health professionals, health care trustees and management, and consumers—to commit to a national statement of purpose for the health care system as a whole and to a shared agenda to pursue the 6 dimensions. It makes 13 recommendations in pursuit of these dimensions. In developing a QI Plan organizations should

consider the six dimensions of this report, ensuring that their QI plan incorporates these characteristics in setting organizational missions and goals.

Applying the S.T.E.E.P methodology in many healthcare organizations is easier said than done. While cost savings can be achieved through eradicating inefficient practices and pursuing clinically effective services, on the whole appropriate and good-quality health care requires more resources. These are needed not just for supporting the necessary infrastructure—for example, around information systems-but also for providing adequate manpower and the costs of new and effective interventions.

Data Collection and Analysis Planning

Within an organization's QI Plan, managing data is an essential part of performance improvement. It involves collecting, tracking, analyzing, interpreting, and acting on an organization's data. Measuring a health system's inputs, processes, and outcomes is a proactive, systematic approach to practice-level decisions for patient care and the delivery systems that support it. Data management also includes ongoing measurement and monitoring. It enables an organization to identify and implement opportunities for improvements to its current care delivery systems and monitor progress as changes are applied.

Frequency

Generally an evaluation of the progress an organization makes toward the goals identified in the QI plan will occur annually. Senior leadership and stakeholders will evaluate if the objectives for the QI plan have been met or if further refinement is required. However, in QI, collecting data on an annual basis does not support quality improvement methodology. A more frequent plan for data collection and analysis is strongly encourage. In short, if an organization plans to collect and analyze data quarterly, they can quickly identify if a particular performance measure has slipped in progress toward goals. They are then well suited to apply improvement methodologies as outlined in the module **Testing for Improvement**, and continue to make progress toward their identified goal. Although the frequency of data collection is not prescriptive, the frequency of data collect should be outlined clearly in the QI Plan. This should also include a plan if an organization finds that an identified performance measure is not meeting the progress they expected. This plan does not need be extensive but could simply refer the measure for attention by the QI Team who initially focused on improving the measure.

Assign Responsibility

A strategy employed by most organizations is to designate a person or department accountable for gathering the data and having it available when the information is due. When the roles and responsibilities of that person are documented, it decreases the risk of disruption during staff transitions. In addition to assigning responsibility for data collection and analysis it is also important to assign responsible person (s) who will take a lead role if an organization finds they are not making progress on a particular goal. One example of this could be if an organization reviews data quarterly and find they are not getting patients into prenatal care in the first

trimester. Since this is an identified priority measure based on the developed health plan, leadership may refer this for immediate attention to the Prenatal Access team. Whatever the process determined by the organization, such assigned responsibilities should be included within the QI plan so that actions can be taken in a seamless and efficient manner so to address the measure not progressing toward goal.

Identify Opportunities for Improvement

The next phase of data collection and analysis or data management t involves two distinct albeit related processes:

1. *Analyzing* data is the *review* of performance data to determine if it meets the desired quality level; it is used to define a performance plan.
2. *Interpreting* data is the process of *assigning* meaning or determining the significance, implications, and conclusions of data collected; it is used to evaluate and improve activities, identify gaps, and plan for improvement.

Analysis and interpretation of data are used in concert when an organization reviews its performance. When the organization has a process in place to collect and display performance data, it ensures sufficient time is reserved to review the data and learn from it.

A organization begins this phase by reviewing the current performance and comparing it to the previous performance of the organization. . This analysis gives a general sense of progress toward the performance goal as identified in the QI Plan. The interpretation process provides knowledge of the changes applied to the systems, special events with a potential impact, and lessons learned from the time period data was collected. It also helps to form the next steps to apply interventions for improvement.

An organization may evaluate its performance against available benchmark data, which is beneficial when compared to the performance goal developed in the QI Plan. Additional information on benchmarking including resources to available organizations to gain benchmark data can be found in the module **Managing Data for Performance Improvement**.

Process to Apply Interventions for Improvement

The Plan-Do-Study-Act (PDSA) cycle is integral to rapid-cycle change methodology with emphasis on the "S" or *study* part of the cycle. Once data is collected, *study* is the analysis and interpretation phase, and when it is completed, an organization can proceed to "A" or *acting* on the data. A organization's analysis and interpretation of the data drives its subsequent actions on performance. Once an organization has completed the analysis of the data they may determine a specific measure requires attention. Once the measure is identified, senior leadership may refer the measure back to the QI Team who initially focused on the improvement of a measure so they may apply improvement strategies with the goal of improvement. Additional information on improvement strategies can be found in the module **Testing for Improvement.** Additional information on QI teams can be found in the module **Improvement Teams**.

Part 4: Implementing a QI Plan

Successful implementation of QI in an organization requires a process for identifying organizational problems and solving them, a process for providing ongoing education and training for all staff of the organization in principles, tools, and techniques of continuous improvement. Furthermore, all staff within the organization should understand clearly the mission and vision of the organization and be committed to quality improvement as part of their daily routine activities. Highlighted below are a few organizational processes to assist in the successful implementation of a QI Plan.

Annual Evaluation and Work Plan Development

The QI Evaluation is often an annual evaluation of the prior year's quality improvement activities, which includes recommendations for the next year. This process generally includes updating the QI plan and gaining approval annually by the Medical Officers in the organization, the Administrative Staff and the Board of Directors. The QI Work Plan is in most cases a detailed, two-year work plan and timetable for the organization's clinical and service quality improvement activities for the current and subsequent calendar years. The QI Work Plan is developed as an outgrowth of the evaluation of the previous year's QI activities and incorporates the recommendations from that evaluation. This document is updated and approved by the organizations Medical Officers, the Administrative Staff and the Board of Directors. The QI Work Plan specifies actions and time frames for each individual quality improvement project.

Continuous Monitoring

The process for developing and implementing a quality improvement plan incorporates the following:

1. A problem is identified through a variety of sources (e.g., member complaints, providers, over or under utilization, clinical quality or safety, or administrative quality indicators).
2. The issues with the greatest impact on the enrolled population are identified based on demographics, utilization and cost of care. Quality indicators are then selected (i.e., it is determined what will be measured and how it will be measured). Through this step, it is determined what data is appropriate for measurement.
3. Data is collected and reviewed for performance and/or outcomes.
4. Targets for improvement are set.
5. A specific work plan is developed that will lead to improvement in performance and/or outcomes.
6. The plan is approved or modified as necessary and implemented.
7. After an appropriate time period, new data may be gathered to assess the success of the plan for improvement or data may be gathered at regular intervals on an ongoing basis for continuous assessment of performance.
8. Through analysis of the data, barriers to improvement are identified.
9. Based on the analysis, a decision is made regarding the next step:
   a. Continue the process as is with the same indicators/data monitoring
   b. Continue the process with modifications (i.e., implement additional interventions to

remove identified barriers)
c. Add new monitors/quality indicators
d. Stop monitoring

10. New thresholds are developed or current targets are maintained.
11. A new work plan is developed.

This process is applied to clinical, service and administrative indicators. The quality indicators and quality improvement work plans are usually compiled into the corporate QI Work Plan, which should be evaluated at least annually. For clinical indicators, the evaluation should include a review by the Medical Officers in the organization, which then provides assistance with the development of the new work plan. Administrative indicators are developed in concert with individual operating departments and are approved by the respective senior leadership. Performance should be reviewed by the Administrative Staff through quarterly and annual reports. The Board of Directors should reviews the corporate QI Plan goals and if thresholds have been met as well as the QI Work Plan on an annual basis as part of its oversight of the entire quality improvement process.

To evaluate improvements and goals, the QI Plan should be reviewed on a regular time frame for each key process. Objective feedback measures may include a display of improvement data (how much cycle times have been reduced, how many complaints have been received, and so on). This enables an organization to take action on performance less than satisfactory. Organizations meeting thresholds can also determine priority areas that may require improvement outside of identified measures.

Resource Allocation

A major barrier reported by health leaders has been the lack of a business case to support the work of Planned Care. The reality is that a front-end investment of time, staff and fiscal resources is required to implement the a QI model approach to healthcare. Unfortunately, the colloquial experience of most organizations is that this investment of resources is not offset by new revenues or cost reductions. Although there is a compelling case for the impact of the planned care on decreasing healthcare utilization and costs, those savings generally accrue to the payers and hospitals rather than to the primary care providers. Quality Improvement at its core requires resources. The resource of manpower to affect the systems that need improvement. Until recently, organizations could not necessarily understand the value on the return on investment in quality improvement in healthcare. Recently there has been a shift to pay for quality models that may influence this factor moving forward. Organizations are strongly encourage to stay up to date on such models to align themselves for incentive programs such as Meaningful Use and PQRI.

Part 6: References

1. Burton RM, DeSanctis G, Obel B. Organizational Design: A Step-by-Step Approach (2004) Cambridge, UK: Cambridge University Press
2. Juran J. Juran on Leadership for Quality: An Executive Handbook. Wilson, Conn.: Juran Institute, 1989.
3. Waldman DA, Lituchy T, Gopalakrishnan M et al. A qualitative analysis of leadership and quality improvement. Leadership Quarterly 1998;9:177–202.
4. Gosfield AG, Reinertsen JL. The 100,000 lives campaign: crystallizing standards of care for hospitals. Health Aff (Millwood) 2005;24:1560–70.
5. Quality Management Technical Assistance Manual. Health Resources and Services Administration, HIV/AIDS Bureau
6. Crossing the Quality Chasm: A New Health System for the 21st Century. Committee on Quality of Health Care in America, Institute of Medicine. **http://www.nap.edu/catalog/10027.htm**

Part 7: Resources

- Baldridge National Quality Program
- Joint Commission on Accreditation of Healthcare Organizations. (1991). *The transition from QA to CQI: An introduction to quality improvement in health care.* Chicago, IL: Author. Ryan, S. M. J. (1993).
- The future is continuous quality improvement. *Quality Management in Health Care, 1*(3), 42-48.
- National Committee for Quality Assurance NCQA
- NQF
- Agency for Research and Quality www.arhq.gov
- Institute for Healthcare Improvement
- Quality Tools www.qualitytools.ahrq.gov
- Physicians Consortium for Performance Improvement www.ama assn/ama/pub/category/2946.html
- Bridges to Excellence www.bridgestoexcellence.org